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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/709,090	04/13/2004	Chien-Sheng Yang	12029-US-PA	3089
31561 7:	590 12/06/2005		EXAM	INER
JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE			DUDEK, JAMES A	
7 FLOOR-1, NO. 100 ROOSEVELT ROAD, SECTION 2 TAIPEI, 100			ART UNIT	PAPER NUMBER
			2871	
TAIWAN			DATE MAILED: 12/06/2005	5

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/709,090	YANG, CHIEN-SHENG				
Office Action Summary	Examiner	Art Unit				
	James A. Dudek	2871				
The MAILING DATE of this communication apperiod for Reply	opears on the cover sheet wi	ith the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1, after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a replevely likely	136(a). In no event, however, may a reply within the statutory minimum of third will apply and will expire SIX (6) MON te, cause the application to become AE	reply be timely filed by (30) days will be considered timely. ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on	·					
2a)⊠ This action is <b>FINAL</b> . 2b)☐ Thi	This action is <b>FINAL</b> . 2b) This action is non-final.					
3) Since this application is in condition for allowa	•	•				
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D.	). 11, 453 O.G. 213.				
Disposition of Claims						
4) Claim(s) 1-21 is/are pending in the application	4) Claim(s) 1-21 is/are pending in the application.					
4a) Of the above claim(s) is/are withdra	awn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-21</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/	or election requirement.					
Application Papers						
9) The specification is objected to by the Examin	ier.					
10) The drawing(s) filed on is/are: a) ac	cepted or b) objected to	by the Examiner.				
Applicant may not request that any objection to the	e drawing(s) be held in abeyar	nce. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction	·					
11) The oath or declaration is objected to by the E	Examiner. Note the attached	d Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreig a)⊠ All b)□ Some * c)□ None of:		§ 119(a)-(d) or (f).				
1. Certified copies of the priority documen						
2. Certified copies of the priority documer		<del></del>				
3. Copies of the certified copies of the prication from the International Burea	•	received in this National Stage				
* See the attached detailed Office action for a lis		received.				
Attachment(s)						
1) Notice of References Cited (PTO-892)	, —	Summary (PTO-413)				
<ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08</li> </ol>	🗖	s)/Mail Date nformal Patent Application (PTO-152)				
Paper No(s)/Mail Date	6)  Other:	·				

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,734,449 (449).

Per claims 1, 10 and 20, 449 teaches a scan line disposed over a substrate [11]; a data line disposed over a substrate [see figure 4]; an active component [50]; a plurality of capacitance electrodes [13',17']; a pixel electrode [19] disposed over the transparent capacitance electrode and connected to the active component, the pixel and capacitance electrode forming a capacitor.

Per claim 2-3, the electrode 13' is connected via 20.

Per claim 4, the TFT is formed of amorphous or poly silicon [see column 3, lines 34-45]. 818 lacks the use of low temp poly silicon. However, it was well known to form TFTs from low temp poly silicon as the process requires less heat. Accordingly, it would have been obvious to one of ordinary skill at the time of invention to form the TFT of 818 using a low temp poly silicon process.

Per claim 8, 449 lacks the gate on bottom type TFT. However, it was well known to combine gate on bottom or substitute gate on bottom gate on top to improve the gate insulating layer and decrease pinhole in the insulating layer. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of invention.

Per claim 9, 449 lacks an explicit teaching that the capacitance electrode is ITO or IZO. However, it was well known to form capacitance electrode from ITO or IZO in order to increase the aperture ratio of the cell. Accordingly, it would have been obvious to one of ordinary skill at the time of invention to form the capacitance electrode of 449 with the well known ITO.

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Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Response to Arguments

Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Dudek whose telephone number is 571-272-2290. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217/9197 (toll-free).

James A. Dudek Primary Examiner Art Unit 2871